CLAIMS

What is claimed is:

1. A method comprising dynamically establishing ATM adaptation layer 2 (AAL2) channel identifiers (CIDs) on a call-by-call basis using ATM standards-based call control signaling protocols.

2. The method of claim 1 further comprising mapping the CIDs to a virtual path/virtual channel (VP/VC) that forms part of a virtual user network interface (UNI) to an ATM network.

3. An ATM node configured to dynamically establish ATM adaptation layer 2 (AAL2) channel identifiers (CIDs) on a call-by-call basis using ATM standards-based call control signaling protocols.

4. The ATM node of claim 3 further configured to map each of the CIDs to a virtual path/virtual channel (VP/VC) that forms part of a virtual user network interface (UNI) to an ATM network.

5. A method comprising mapping ATM adaptation layer 2 (AAL2) channel identifiers (CIDs) to a virtual path/virtual channel (VP/VC) within a standards-based ATM call control protocol.

6. The method of claim 5 wherein the standards-based ATM call control protocol is selected from the list comprising UNI 3.1/4.0 and Q.2931.

7. The method of claim 5 wherein the mapping is performed at a network edge device communicatively coupled to customer premises equipment.

8. The method of claim 7 wherein the network edge device is communicatively coupled to the customer premises equipment over time division multiplexed communication channels.

9. The method of claim 8 further comprising mutliplexing the time division multiplexed communication channels to one or more AAL2 VPs/VCs.

10. The method of claim 9 further comprising mapping the one or more AAL2 VPs/VCs to the CIDs prior to mapping the CIDs to the VP/VC.

11. Computer-readable instructions, which when implemented by a processor, cause the processor to map ATM adaptation layer 2 (AAL2) channel identifiers (CIDs) to a virtual path/virtual channel (VP/VC) within a standard-based ATM call control protocol.

12. A computer-readable medium embodying the computer-readable instructions of claim 11.

13. The computer-readable instructions of claim 11 further comprising additional instructions, which when implemented by the processor, cause the processor to multiplex one or more time division multiplexed communication channels to one or more AAL2 VPs/VCs prior to mapping the AAL2 CIDs to the VP/VC.

14. The computer-readable instructions of claim 13 further comprising yet more instructions, which when executed by the processor, cause the processor to map the one or more AAL2 VPs/VCs to the CIDs prior to mapping the CIDs to the VP/VC.